



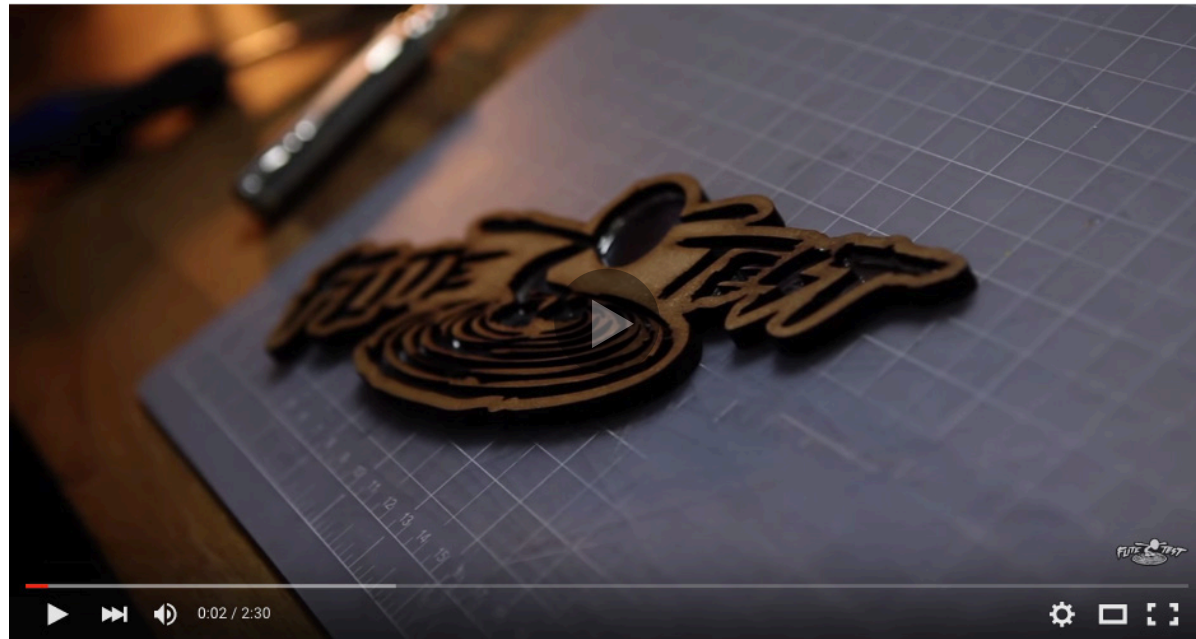
ASSEMBLY

No GUIDE 01

TINY TRAINER



HELLO FRIEND



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Quick Tips for Your First Flight

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Flite Test Product Family Tree

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BUILDING BASICS

The world of RC flight can seem daunting at first. There are a lot of terms that can be confusing if you're not familiar with them. If this is your first build, we strongly recommend that you check out the [Flite Test Beginner Series](#) and the RC Glossary.

These references can help make the build process go more smoothly.



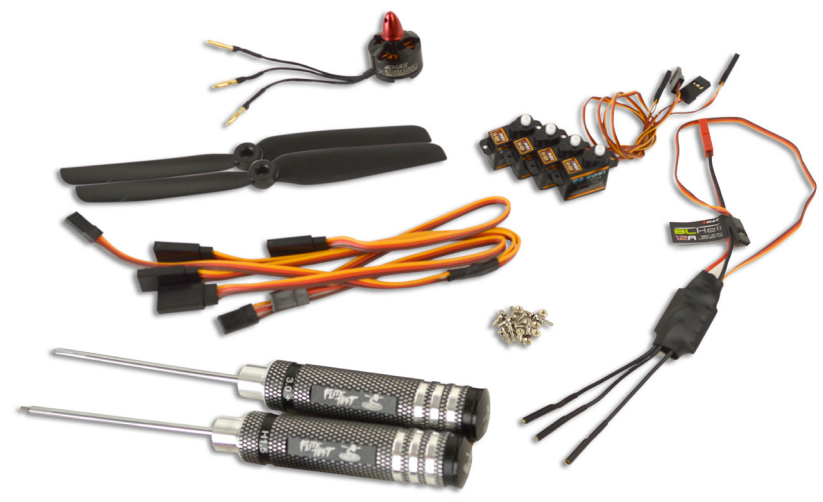
THE TINY TRAINER

The Tiny Trainer is a one stop shop for learning how to build and fly planes.



WHAT YOU PURCHASED:

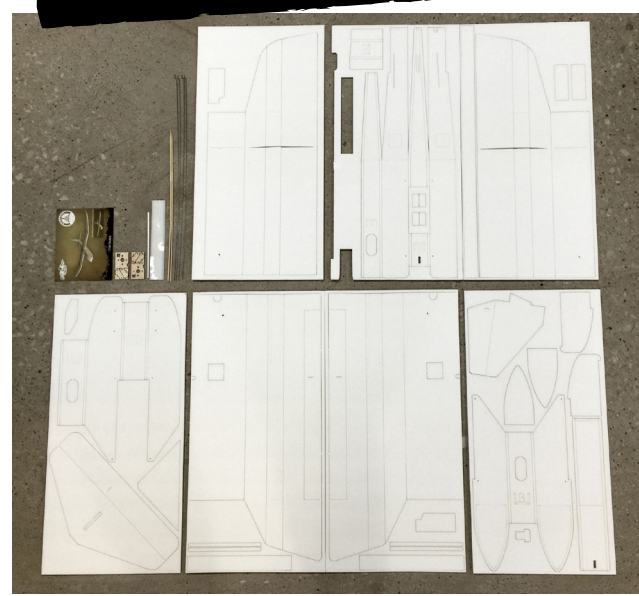
POWER PACK A



CRAFTY KIT



SPEED BUILD KIT

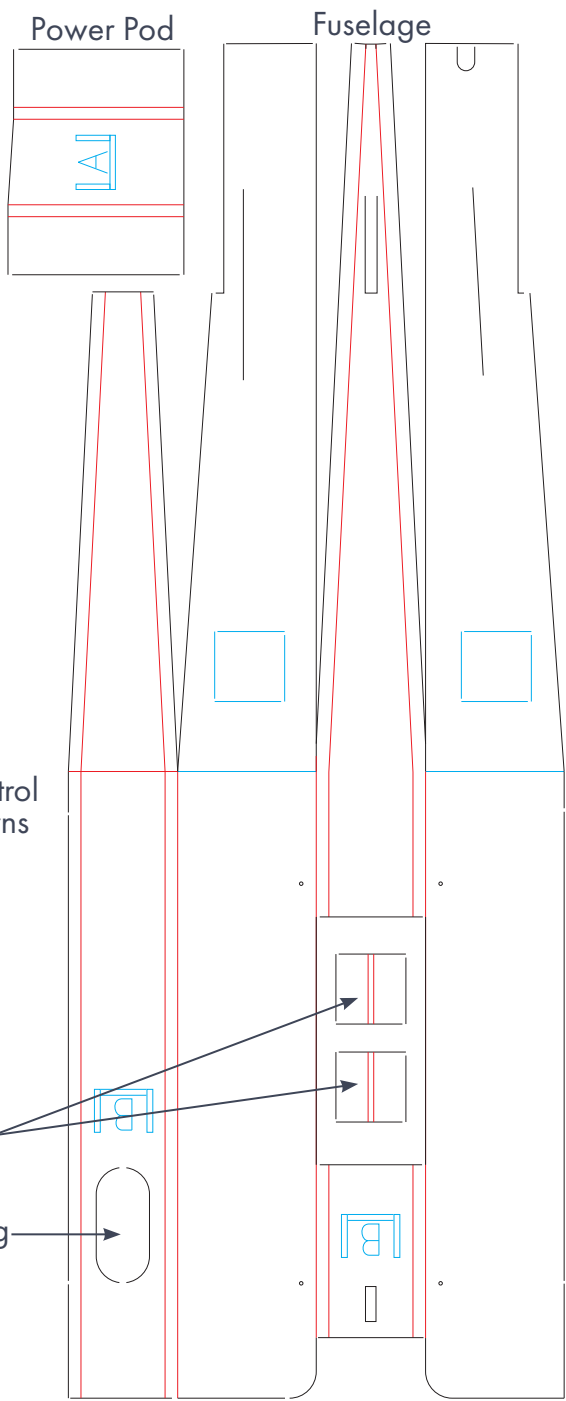
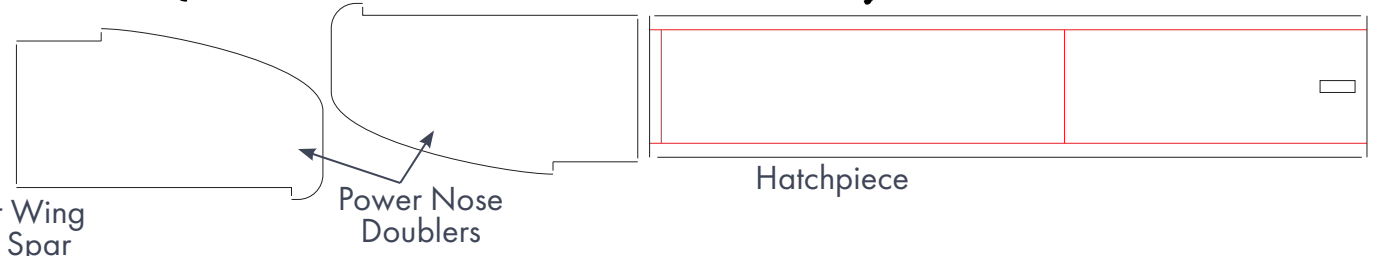
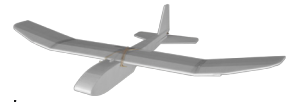


TRANSMITTER & RECEIVER

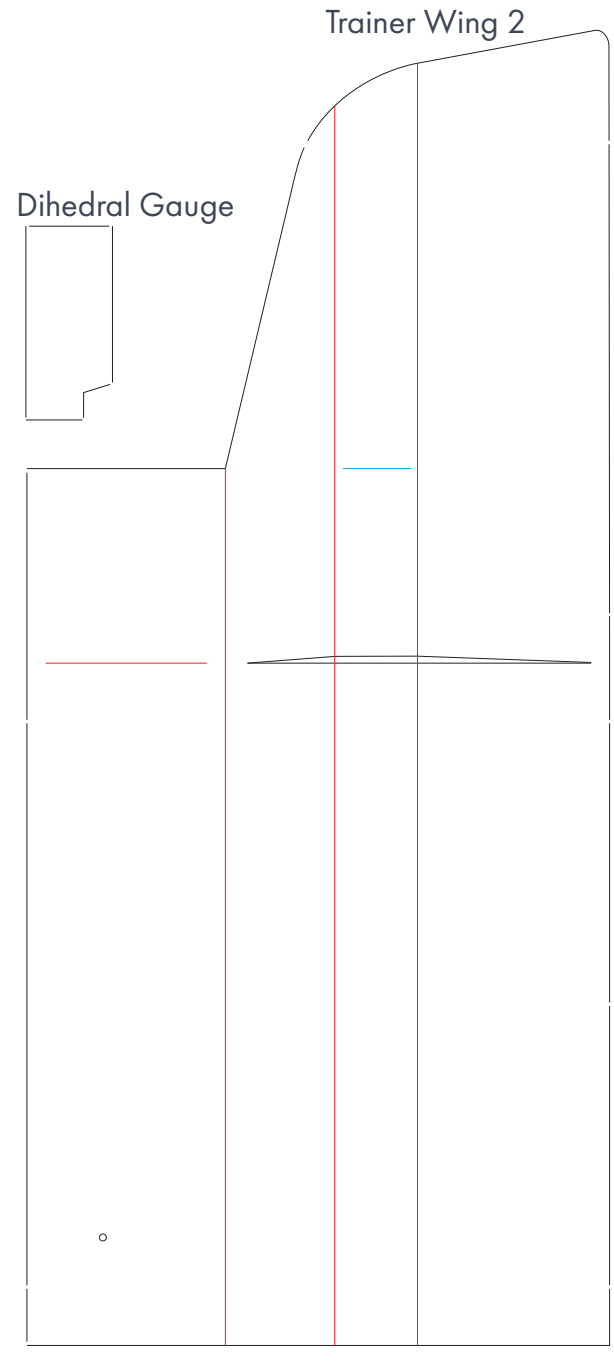
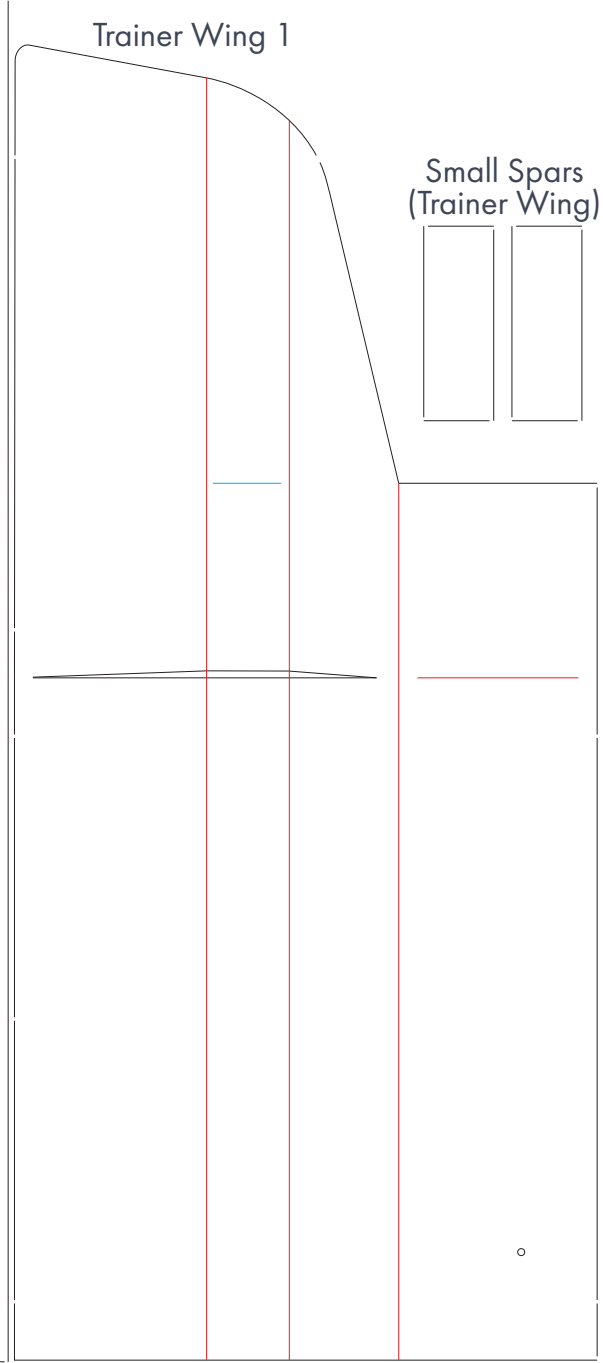


TINY TRAINER AIRFRAME (TRAINER WINGS):

black = cut
 red = score 50%
 blue = lightly crease

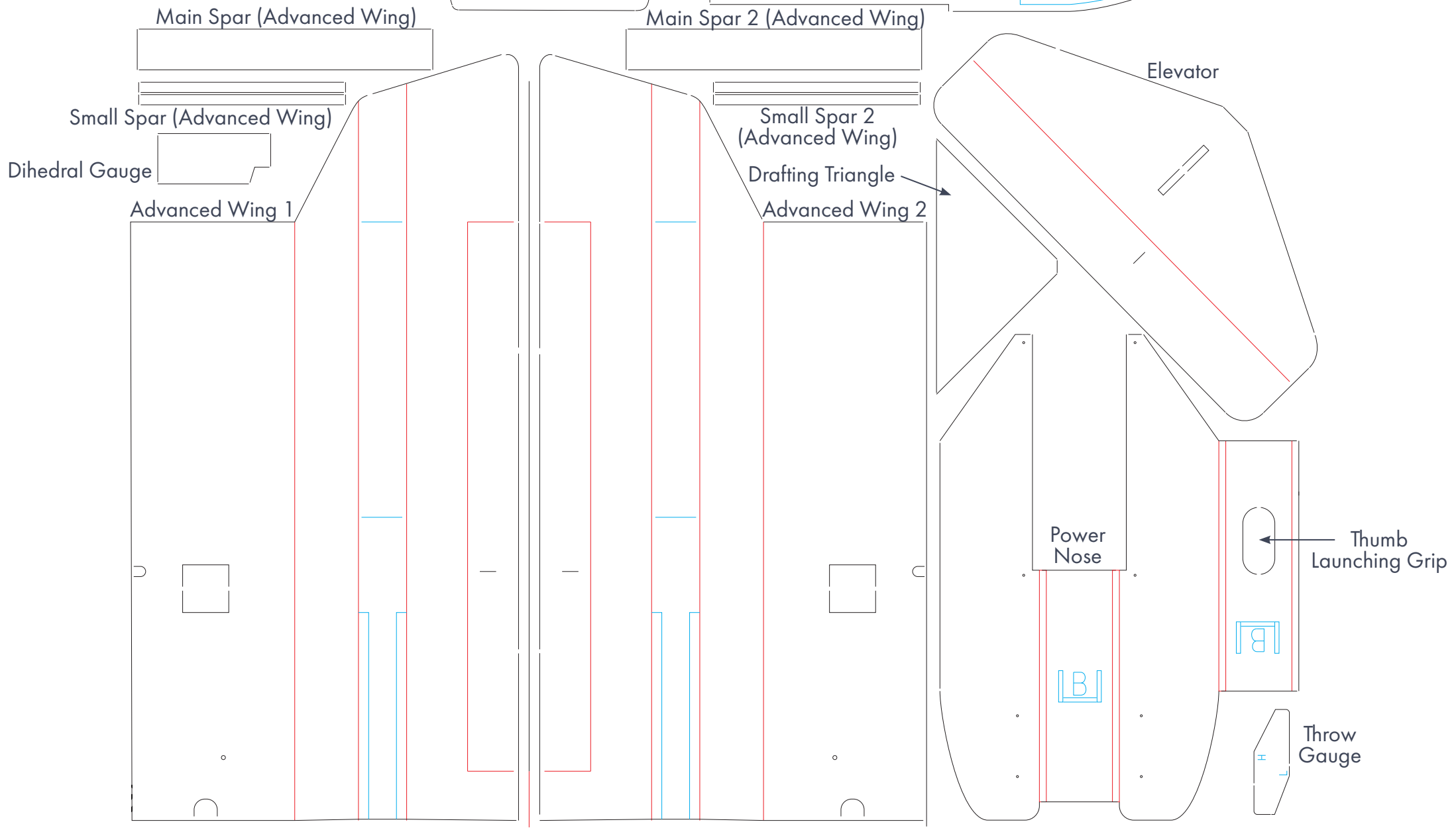
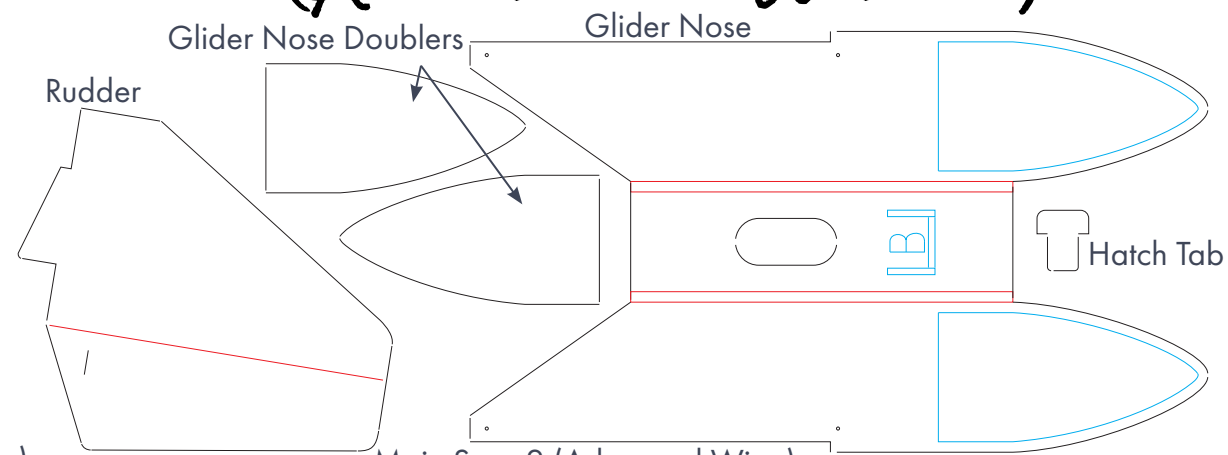


Trainer Wing Main Spar



TINY TRAINER AIRFRAME (ADVANCED WINGS):

black = cut
 red = score 50%
 blue = lightly crease



PROCEDURES YOU WILL BE USING:

A TYPE FOLD

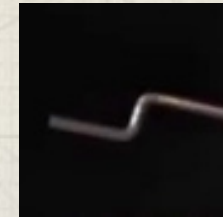
Fold the side wall so that the cheeks are glued on top of the bottom plate as depicted.

[See illustration.](#)



Z-BEND

Use Pliers to bend your Push Rods into a "Z."



B TYPE FOLD

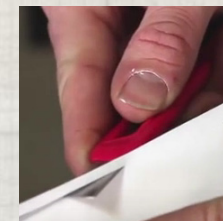
Fold the side wall so that the cheeks are glued to the side of the bottom plate as depicted.

[See illustration.](#)



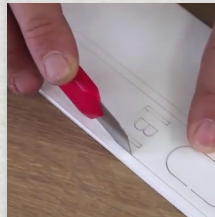
BEVEL

Use your Exacto Knife or Sandpaper to make an angle along the specified side of foam, being careful not to cut through the paper.



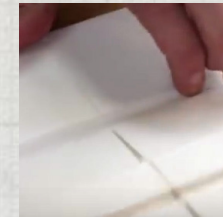
SCORE CUT

Use your Exacto Knife to make a shallow cut, taking care not to cut through the bottom paper.



DOUBLE BEVEL

Use your Exacto Knife or Sandpaper to create a shallow angle on both sides of the foam.



CUT THROUGH

Use your Exacto Knife to cut through the foam and the paper so that the piece can be separated completely.



SQUEEGEE

Use a spare piece of foam to wipe off excess hot glue.



ETCH/CREASE

Use your Exacto Knife or Barbecue Skewer to make a small cut or score, opening up the area so it will fold/break more easily.



DRY FIT

When you see the words "dry fit", attach or fold the foam pieces together without any glue to make sure the fit is to your liking.



THE BUILD

FUSELAGE



POP OUT YOUR FUSELAGE, RUDDER AND ELEVATOR

1. On the Fuselage, score the partially cut lines with your Large Knife, being careful not to cut through the other side of the foam ([Illustration 1](#)).
2. Remove the excess by using your fingers to separate the foam and roll it away.
3. Follow up by using your Large Knife to scrape off any remaining foam. Take your time with this step because the cleaner you get the edges, the better everything will fit together.



GLUE YOUR FUSELAGE TOGETHER

1. Place your Steel Ruler along the score line shown in [Illustration 2](#), and bend all three areas of the Fuselage upwards slightly.
2. Do a B Fold on the Fuselage, doing a dry fit first.
3. Then use your Hot Glue Gun to glue the sides together.
4. Use your Drafting Triangle to make sure the sides stay at a 90° angle while they dry ([Illustration 3](#)).
5. Don't glue the top plate down yet.



INSERT YOUR PUSH RODS

1. Grab two Push Rods.
2. If they do not have a Z-bend, use your Pliers to make a Z-bend on one side of the Push Rod.
3. Using your Push Rod, score the opening on the side of the Fuselage.
4. Then guide your Push Rod into the Fuselage, keeping your Z-bend on the outside ([Illustration 4](#)).



MAKE YOUR SPACER DISKS

1. Pop out the Spacer Disks.
2. Remove the excess foam from the Spacer Disks ([Illustration 5](#)).
3. Place a bead of glue in the space between the foam.
4. Then glue your Coffee Stirrer sandwiched between the foam ([Illustration 6](#)).
5. Repeat the process with the second spacer disk, leaving some space between them ([Illustration 7](#)).
6. After both disks dry, use your Small Knife to cut the excess flesh from the Coffee Stirrer ([Illustration 8](#)).



GLUE YOUR SPACER DISKS INTO YOUR FUSELAGE

1. Pass your first Push Rod through a spacer disk.
2. Place some glue on the Spacer Disk, lining it up with the square etch marks on the opposite side of the Fuselage from where you inserted the Push Rod ([Illustration 9](#)).
3. Let dry, and then repeat the process with the other Push Rod.
4. Your Push Rods should now be crossed and able to move freely inside the Fuselage ([Illustration 9a](#)).



GLUE DOWN THE TOP PLATE OF YOUR FUSELAGE

1. Do a test fit for the top plate of the Fuselage to ensure that it's square.
2. Place glue along the foam on both sides of the top plate, stopping just shy of the edge.
3. Fold over, making sure the edges fit neatly together.
4. Drag your Drafting Triangle and apply pressure along the top plate for a better fit.
5. Use your Drafting Triangle to make sure the sides stay square, and hold the top plate until the glue dries ([Illustration 10](#)).



REMOVE EXCESS FOAM FROM ELEVATOR

1. Place your Steel Ruler along the etch line of your Elevator.
2. Pull the triangular side (the stabilizer) upward to break the foam free ([Illustration 11](#)).
3. Fold the other side (the Elevator) over, and use your Large Knife to cut a Bevel at a 45° angle ([Illustration 12](#)).
4. Be sure to cut parallel to your body, and keep your thumb and fingers away from the blade. It is best to cut the Bevel while holding the foam piece on the edge of a flat surface ([Illustration 13](#)).
5. The Elevator side should be able to move freely in both directions. If it doesn't, cut a little more from the Bevel.



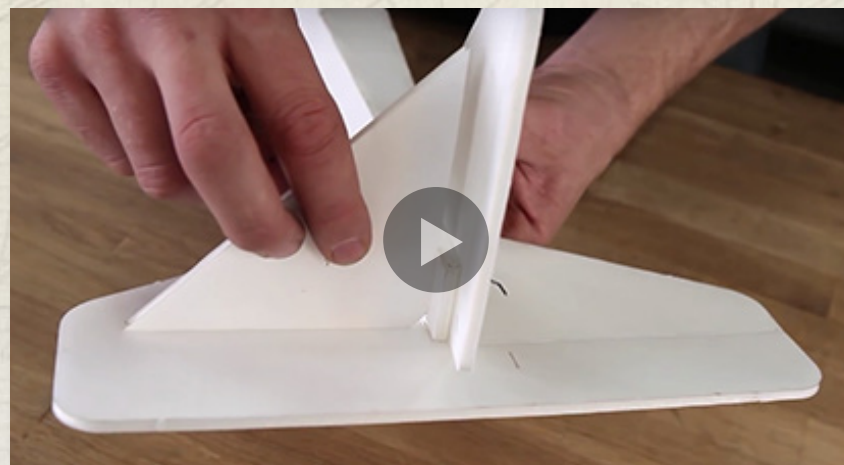
REMOVE EXCESS FOAM FROM RUDDER

1. Repeat the same process with your Rudder.
2. Crack the foam between the fin and the Rudder.
3. Cut a 45° Bevel on the Rudder side, cutting just to where the paper starts. You can also use a Sandpaper to sand any Bevel ([Illustration 14](#)).



MAKE YOUR TAIL ASSEMBLY

1. Use your Knife to cut through the etch mark on the stabilizer side of the Elevator.
2. Remove the foam, and then take your Rudder and insert it into the opening ([Illustration 15](#)).
3. Use your Drafting Triangle to make sure it is perpendicular.
4. Place glue on the foam side of the fin, skipping the keel.
5. Insert the Rudder into the opening on the Elevator. Because the keel will stick out from the bottom, it is best to do this on the side of the table ([Illustration 16](#)).
6. Hold until dry, using your Drafting Triangle to ensure the Rudder stays perpendicular to the Elevator ([Illustration 17](#)).
7. Your tail assembly is complete!



ATTACH YOUR TAIL ASSEMBLY TO YOUR FUSELAGE

1. Use your Knife to cut the notch on the top of your Fuselage, and continue the cut all the way to the edge, using your Steel Ruler or Drafting Triangle as a reference guide ([Illustration 18](#)).
2. Guide the tail assembly into the Fuselage to test the fit ([Illustration 19](#)), using your Drafting Triangle to make sure it is perpendicular ([Illustration 19a](#)).
3. Slide the tail assembly down so that the bottom of the Fuselage is exposed ([Illustration 20](#)).
4. Place glue on the bottom foam of the Fuselage, and then rotate the tail assembly into place ([Illustration 21](#)).
5. Hold your Drafting Triangle against the Rudder to ensure it dries square.
6. Once it's dry, place some glue on top of the foam at the end of the Fuselage ([Illustration 22](#)).
7. Use a scrap piece of foam to remove the excess.



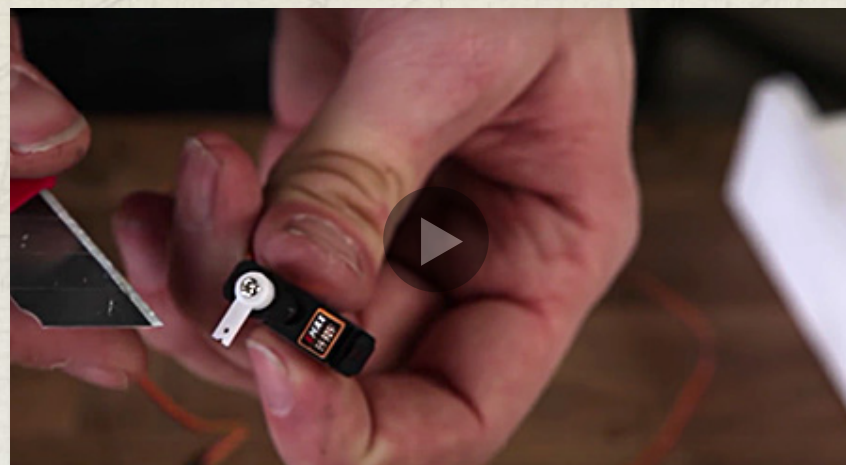
CONTROL HORNS FOR YOUR FUSELAGE

1. Pop out your Control Horns. Take one Control Horn, and press it into the slot on the Rudder ([Illustration 23](#)).
2. The hole in the Control Horn should be directly over the hinge line.
3. Remove the Control Horn, and slide the Z-bend of your Push Rod into the hole, keeping the Z-bend on the inside of the Control Horn ([Illustration 24](#)).
4. Do another test fit to ensure the Control Horn has a full range of motion, and then glue into place.
5. Hold until thoroughly dry.
6. Repeat the process on the Elevator ([Illustration 25](#)).



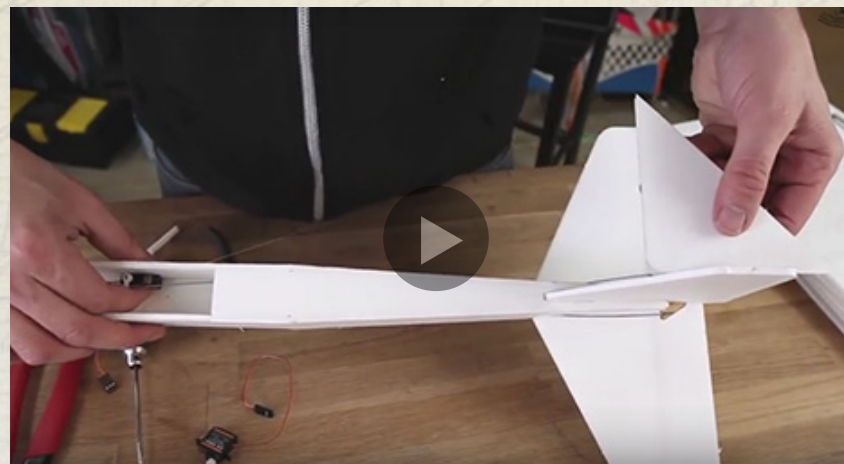
CENTER YOUR RUDDER AND ELEVATOR SERVOS

1. Grab two Servos, and take out all of the components.
2. Plug the Servo wire into the aileron port of your Receiver ([Illustration 26](#)).
3. You want to make sure all the Servos are centered on their trims. Power up your Transmitter with the throttle closed ([Illustration 27](#)).
4. Press the button on your Transmitter, listening for one long beep.
5. Do this for both trims of your Servo.
6. Power up your Servo by plugging the Battery into the ESC wire.
7. Put a control arm on your Servo, and check for motion by moving the right stick of your Transmitter.



READY YOUR SERVOS AND CONTROL HORNS

1. Repeat the process for the other Servo.
2. Grab a Servo and a control arm.
3. Take the plastic control arm, and cut the two outer holes, leaving only the inner hole ([Illustration 28](#)).
4. Using a small screw, attach the Control Horn to the Servo.
5. Repeat the process with the other Servo.
6. Remove the stickers from the sides of the Servos, and use either your Sandpaper or Small Knife to rough up the sides. This will give the glue something to stick to.



GLUE YOUR SERVOS INSIDE YOUR FUSELAGE

1. Using your Pliers or Z-bend Pliers, make a vertical Z-bend on both Push Rods inside the Fuselage ([Illustration 29](#)).
2. Use Wire Cutters to cut off any excess, being careful not to point it at yourself or anyone else while doing so.
3. Pass one Push Rod through the Control Horn.
4. Do a dry fit to ensure that the Rudder is centered, and move the Servo away from the Fuselage wall.
5. Place a drop of glue on the side of the Servo, and attach it to the side of the Fuselage ([Illustration 30](#)).
6. Let dry, and then repeat the process with the other Servo.
7. As the second Servo dries, you may want to use a Screwdriver to hold the Servo up against the wall of the Fuselage ([Illustration 31](#)).

THE BUILD

GLIDER NOSE



PREPARE THE FOAM PIECES OF YOUR GLIDER NOSE

1. Pop out the Glider Nose body, hatch and doubler pieces.
2. Use your Knife to score cut as close to the paper as possible.
3. Remove the excess foam with your fingers and your Knife.
4. Put some glue on the back of the doublers, and place on the etch marks inside the nose ([Illustration 1](#) and [Illustration 1a](#)).
5. Hold until dry, and then repeat for the other doubler.
6. Do a test B fold on the nose. Put glue on the foam part of the bottom plate, make your B Fold, and hold until dry.
7. Use your Drafting Triangle to make sure the sides stay square ([Illustration 2](#)). Repeat process with the other side.



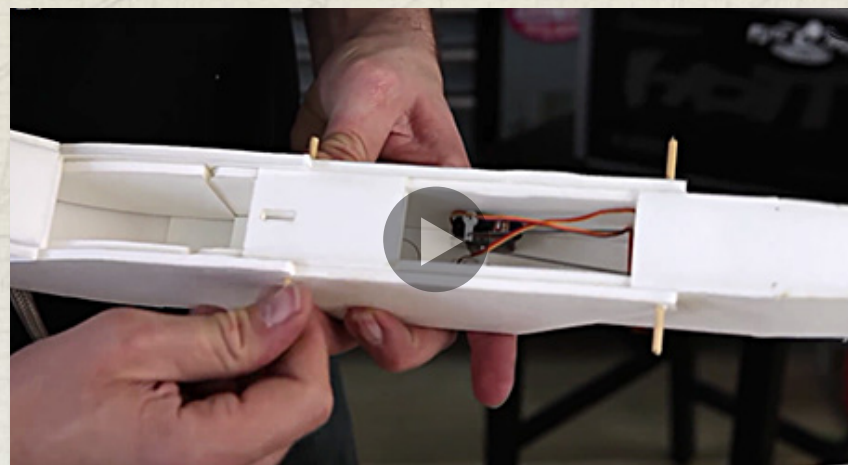
READY YOUR HATCH PIECE

1. Take your hatch piece, and remove the paper from the top ([Illustration 3](#)).
2. Reinforce the paper edges using either tape or hot glue.
3. If you choose to use glue, remember to squeegee off the excess with a scrap piece of foam.
4. Let dry.
5. Open up the score cut, fold over and reinforce with a little glue, scraping off the excess as before ([Illustration 4](#)).
6. Do not fold back until it is thoroughly dry.




COMPLETE GLIDER NOSE BODY

1. Do a dry fit with your hatch piece on your Glider Nose ([Illustration 5](#)).
2. Press the bottom plate on top of the paper at the end of the hatch piece, using glue to anchor the bottom plate to the paper ([Illustration 6](#)).
3. Press hard against the table, and allow glue to dry.
4. Roll the hatch piece up and over the front end of the nose ([Illustration 7](#)).
5. Go slowly so that the foam bends to match the curve of the nose. When you're happy with the curve, put glue down on the portion up to the fold, and stop a centimeter or half an inch from the seam ([Illustration 8](#)).
6. Do not glue the other portion! This will be the hatch that allows you to put clay or electronics inside the nose. Make sure you pull the bottom half up into the nose, and apply constant pressure until it's dry ([Illustration 9](#)).



ATTACH TAB TO GLIDER NOSE

1. Pop out the tab, and slide it into the hole in the hatch ([Illustration 10](#)).
2. Slide the Fuselage into the Glider Nose ([Illustration 11](#)).
3. The holes on the sides of the nose should line up.
4. Take your Barbecue Skewer, and puncture the holes using the pointy end ([Illustration 12](#)). 
5. Pass the Skewer through the holes completely.
6. Leave a half inch of Skewer on either side ([Illustration 13](#)).



ATTACH GLIDER NOSE TO FUSELAGE

1. Remove the Skewer, and use your Knife to cut it, rolling the Skewer underneath your Knife and pulling it apart ([Illustration 14](#)).
2. Use your first cut Skewer to measure another piece of equal length.
3. Place the cut Skewers back in the holes to secure the nose to the Fuselage ([Illustration 15](#)).
4. Pull the hatch down, and insert the tab into the opening.
5. Glue the tab down to the top hatch ([Illustration 16](#)).
6. Put a little glue on the bottom of the tab as well to keep it from delaminating.
7. Use a scrap piece of foam to spread the glue around the entire bottom portion of the tab.



REINFORCE YOUR GLIDER NOSE

1. Use your Knife to remove the holes at the bottom of the nose ([Illustration 17](#)).
2. Remove the nose from the Fuselage, and cover the bottom of the nose with Packaging Tape for reinforcement.
3. Make your Packaging Tape a little long, and then wrap the tape around the other side.
4. You may want to cut the tape so that it moves more easily.
5. Cut out the tape from the thumb grip ([Illustration 18](#)).

THE BUILD

POWER NOSE



PREPARE THE FOAM PIECES OF YOUR POWER NOSE

1. Pop out the Power Nose body and doubler pieces.
2. Use your Knife to score cut as close to the paper as possible, and remove the excess foam with your fingers and your Knife.
3. Do your B Fold test fit, then glue the foam side, rotate the side up and hold to dry ([Illustration 1](#)).
4. Use your Drafting Triangle to ensure it's at a 90° angle ([Illustration 1 a](#)).
5. Repeat for other side.
6. Put glue along the foam of the top piece, and then fold over.
7. Press against the table and hold until dry ([Illustration 2](#)).




ATTACH YOUR DOUBLERS

1. Grab your doublers, and do a dry fit ([Illustration 3](#)).
2. Glue them in one at a time. Slide it around a little to spread the glue around the entire doubler, and then make sure the edges line up as close as possible.
3. Keep pushing down on the doubler until it's completely dry.
4. Once both doublers are dry, use glue to reinforce them ([Illustration 4](#)), smearing the glue with a scratch piece of foam.



ATTACH YOUR POWER NOSE TO YOUR FUSELAGE

1. Slide the nose into the Fuselage ([Illustration 5](#)).
2. The holes on the sides of the nose should line up. Take your Barbecue Skewer, and puncture the holes using the pointy end ([Illustration 6](#)). 
3. Pass the Skewer through the holes completely.
4. Leave a half inch of Skewer on either side.
5. Remove the Skewer, and use your Knife to cut it, rolling the Skewer underneath your Knife and pulling it apart ([Illustration 7](#)).
6. Use your first cut Skewer to measure another piece of equal length.
7. Place the cut Skewers back in the holes to secure the nose to the Fuselage ([Illustration 8](#)).

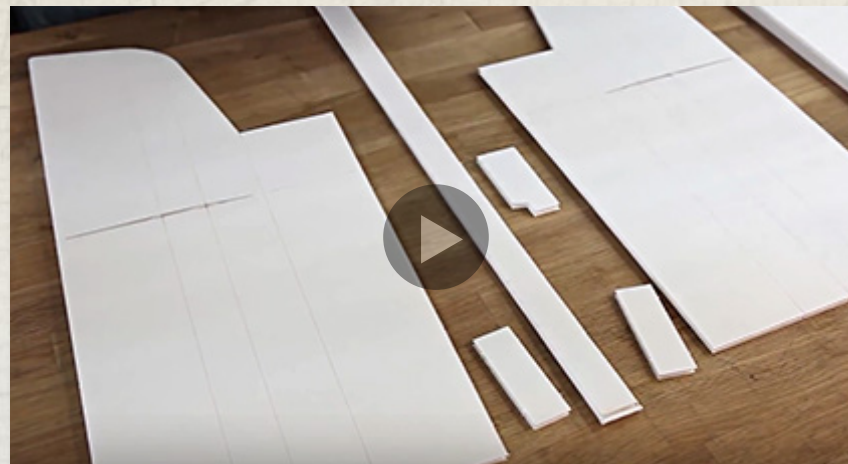


REINFORCE YOUR POWER NOSE

1. Use your Knife to remove the holes at the bottom of the nose ([Illustration 9](#)).
2. Remove the nose from the Fuselage, and cover the bottom of the nose with packing tape for reinforcement ([Illustration 10](#)).
3. Make your Packaging Tape a little long, and then wrap the tape around the other side. You may want to cut the tape so that it moves more easily.
4. Cut out the tape from the thumb grip as well ([Illustration 11](#)).

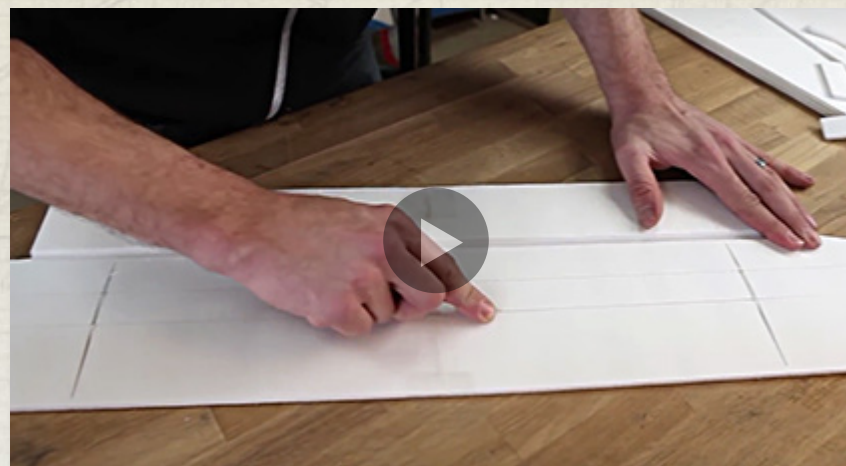
THE BUILD

TRAINER WING



PREPARE THE FOAM PIECES OF YOUR TRAINER WING

1. Pop out the pieces for your Trainer Wing. Take the two large halves, line them up side by side and put a little tape on each end to hold it together ([Illustration 1](#)).
2. Take a longer piece of tape, and cover the entire seam ([Illustration 2](#)), smoothing the tape out with your Drafting Triangle and leaving some extra tape on either side (you'll fold this over later). When you pick it up, it should have a nice hinge.
3. On the untaped side, fold the hinge back, and put glue on the foam in the seam ([Illustration 3](#)). Try not to glue the tape because it could melt.
4. Lay the wing flat, grab a scrap piece of foam and smear the excess glue all along the seam. Fold the extra tape over on top of the seam. Hold the wing flat with your hands until dry.



MAKE YOUR TRAINER WING MOVE FREELY

1. Using the edge of the table or your Steel Ruler, crack the leading edge away from the wing ([Illustration 4](#)).
2. Fold the leading edge over, and make a Double Bevel ([Illustration 5](#)).
3. In the area where you smeared the glue, take your Knife, and make a score cut along the etch marks ([Illustration 6](#)).
4. Use the pointy end of your Barbecue Skewer to open up the etch lines the whole length of the wing, taking care not to break the paper.



CREATE YOUR TRAINER WING SHAPE

1. Fold the wing over, and hold it flat ([Illustration 7](#)).
2. Take the main spar, and line it up inside the etch lines ([Illustration 8](#)).
3. Glue the main spar down, lining it up right at the edge of the seam line ([Illustration 9](#)).
4. Hold until dry.
5. Repeat the process with the two smaller spars, gluing them inside the corresponding etch marks ([Illustration 10](#)).
6. Hold until dry.



GLUE YOUR TRAINER WING TOGETHER

1. Test fit the wing by folding it over and holding it flat.
2. Place glue along all the score marks ([Illustration 11](#)), skipping the two seams.
3. Have an extra hot glue stick handy in case you run out of glue during this step.
4. Fold the wing over, and hold until dry.
5. Once dry, put glue on your Double Bevel cut ([Illustration 12](#)) and your main spar.
6. Fold over, and hold until dry, focusing most of your pressure on the main spar and the back trailing edge ([Illustration 13](#)).



ADD DIHEDRAL

1. Using your Knife, cut out the score marks on the top of the wing for the polyhedral ([Illustration 14](#)).
2. Once it's cut and the foam has been removed, you should be able to lift the wing tip up ([Illustration 15](#)).
3. Use your dihedral gauge to hold up the wing tip ([Illustration 16](#)).
4. Put glue in the crack ([Illustration 17](#)), and prop the wing up on the dihedral gauge.
5. Take a scrap piece of foam to smooth out the glue, and put some weight on it so that it dries evenly ([Illustration 18](#)).
6. Give it 4 minutes to dry.
7. While it's drying, set some tape on top of the glue, folding it around to the bottom.
8. Repeat the process on the other side of the wing.



REINFORCE YOUR TRAINER WING

1. Take a piece of your Skewer, and cut off the pointy end.
2. Cut the tape on the foam along the trailing edge ([Illustration 19](#)), and then glue the Skewer to the foam ([Illustration 20](#)).
3. Use a scrap piece of foam to remove excess glue, and then cover it with a piece of tape.

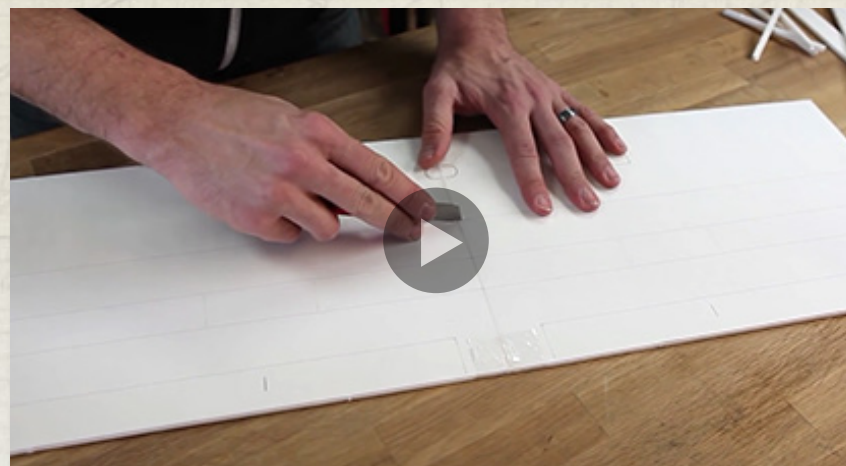
THE BUILD

ADVANCED WING



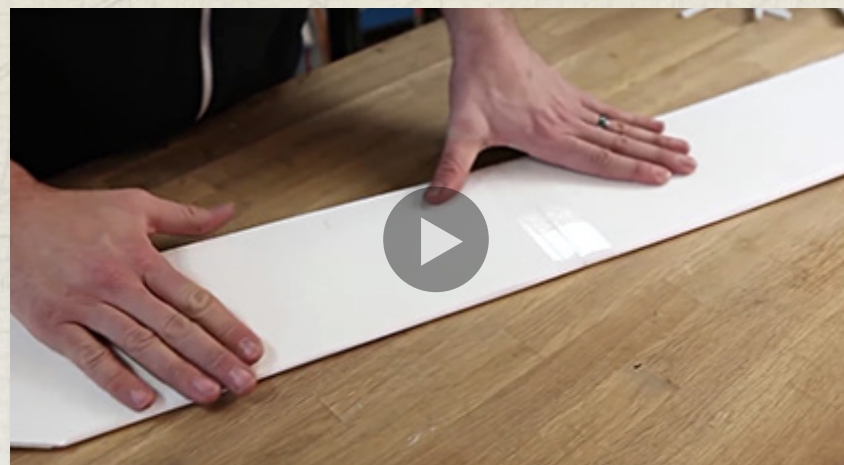
PREPARE THE FOAM PIECES OF YOUR ADVANCED WING

1. Pop out the pieces for your Advanced Wing, but don't cut the ailerons yet (you'll do that step later). Take the two large halves, line them up side by side and put a little tape on each end to hold it together ([Illustration 1](#) and [1a](#)).
2. Take a longer piece of tape, and cover the entire seam ([Illustration 2](#)), smoothing the tape out with your Drafting Triangle and leaving some extra tape on either side (you'll fold this over later). When you pick it up, it should have a nice hinge.
3. On the untaped side, fold the hinge back. You'll notice that there is a gap in the seam. Don't put any glue there. Only glue up to midway past the first etch mark and on the other end just beyond the ailerons ([Illustration 3](#) and [3a](#)).
4. Lay the wing flat, grab a scrap piece of foam and smear the excess glue all along the seam. Let dry. Fold the extra tape over on top of the seam.



MAKE YOUR ADVANCED WING MOVE FREELY

1. Make a score cut through the glue along the leading edge.
2. Using the edge of the table or your Steel Ruler, crack the leading edge away from the wing ([Illustration 4](#)).
3. Fold the leading edge over, and make a Double Bevel ([Illustration 5](#)).
4. Fold the wing over, and hold it flat, putting a lot of pressure on the leading edge ([Illustration 6](#)).
5. Use the pointy end of your Skewer to open up the etch lines on the whole length of the wing, taking care not to break the paper.



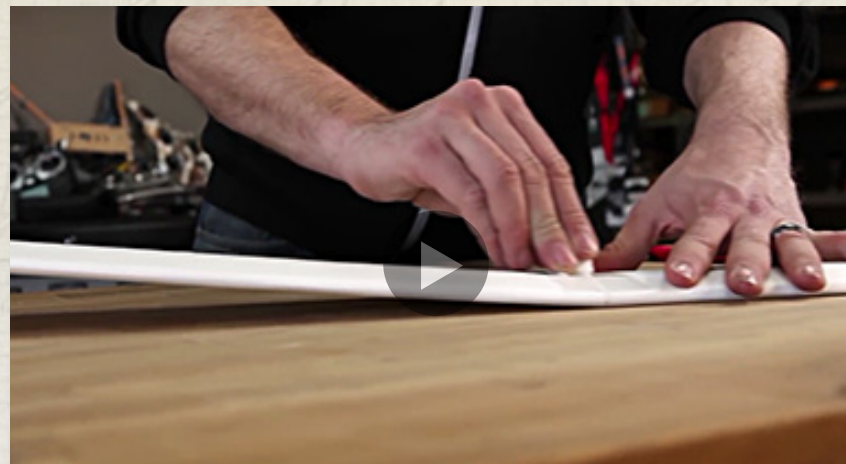
CREATE YOUR ADVANCED WING SHAPE

1. Take the first spar, and glue it down, lining it up right at the edge of the seam line ([Illustration 7](#)).
2. Hold until dry.
3. Repeat the process on the other side.
4. Grab a small spar, and line it up next to the etch marks ([Illustration 8](#)).
5. Glue it down, and then put another small spar on the other side of the etch marks ([Illustration 9](#)).
6. Hold until dry.
7. Repeat on the other side ([Illustration 10](#)).



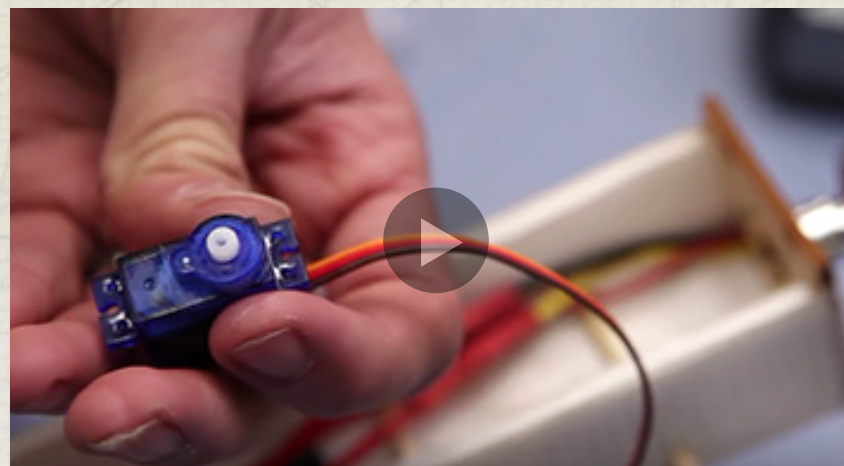
GLUE YOUR ADVANCED WING TOGETHER

1. Take your Knife, and remove the hole at the top ([Illustration 11](#)).
2. Fold the wing over, and hold it down.
3. Place glue along the two main score marks ([Illustration 12](#)). Have an extra hot glue stick handy in case you run out of glue during this step.
4. Fold the wing over, and hold until dry, maintaining the wing shape.
5. Once that dries, put glue on your Double Bevel ([Illustration 13](#)) and on the spars ([Illustration 14](#)).
6. Fold over, and hold until dry.
7. Put a bead of glue on the rear seam ([Illustration 15](#)).
8. Hold it as it's upside down until dry.



ADD DIHEDRAL

1. Use your Knife to slice the seam in the wing area ([Illustration 16](#)).
2. The wing should now bend freely ([Illustration 17](#)).
3. Use your dihedral gauge to hold up the wing ([Illustration 18](#)).
4. Put glue in the crack ([Illustration 19](#)), and prop the wing up on the dihedral gauge.
5. Take a scrap piece of foam to smooth out the glue, and put some weight on it so that it dries evenly ([Illustration 20](#)).
6. Give it 4 minutes to dry.
7. When it's dry, put some tape on top of the glue, folding it around to the bottom.
8. Repeat the dihedral process on the other side.



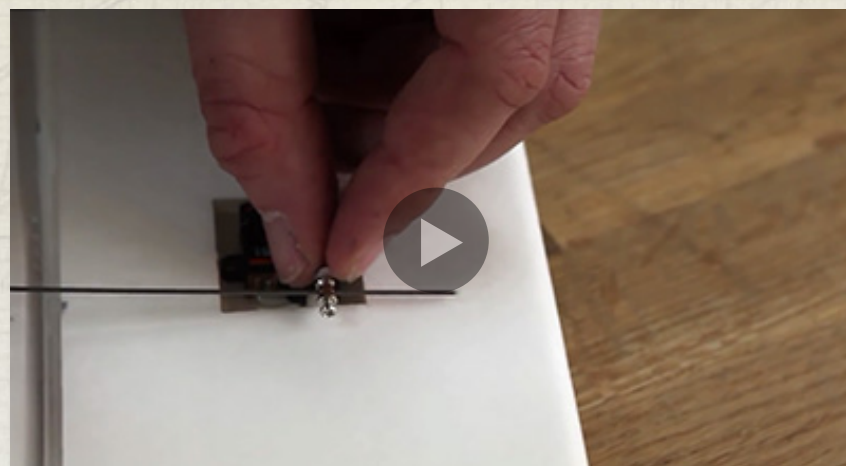
READY YOUR AILERON SERVOS

1. Grab two Servos, and take out all of the components.
2. Plug the Servo wire into the aileron port of your Receiver ([Illustration 21](#)).
3. You want to make sure all the Servos are centered on their trims.



CENTER YOUR AILERON SERVOS

1. Power up your Transmitter with the throttle closed ([Illustration 22](#)).
2. Press the button on your Transmitter, listening for one long beep.
3. Do this for both trims of your Servo.
4. Power up your Servo by plugging the Battery into the ESC wire.
5. Put a control arm on your Servo, and check for motion by moving the right stick of your Transmitter.
6. Attach the control arm using the smallest Servo screw you have ([Illustration 23](#)).
7. Repeat the process for the other Servo.



ATTACH LINKAGE STOPPERS TO YOUR AILERON SERVOS

1. Open up the wire hole ([Illustration 24](#)) and the two etched squares ([Illustration 25](#)).
2. Grab your Servos, and install the Linkage Stoppers into the second hole of the control arm ([Illustration 26](#)).
3. You will need to enlarge the second hole by carefully rotating your Knife in the hole until it's big enough to fit the screw of the Linkage Stopper ([Illustration 27](#)).
4. Slide the Linkage Stopper into the hole, and secure with a wing nut on the other side ([Illustration 28](#)).
5. Screw a small screw into the top of the Linkage Stopper ([Illustration 29](#)). Don't screw it all the way in until after you have guided your Push Rod through the Linkage Stopper.



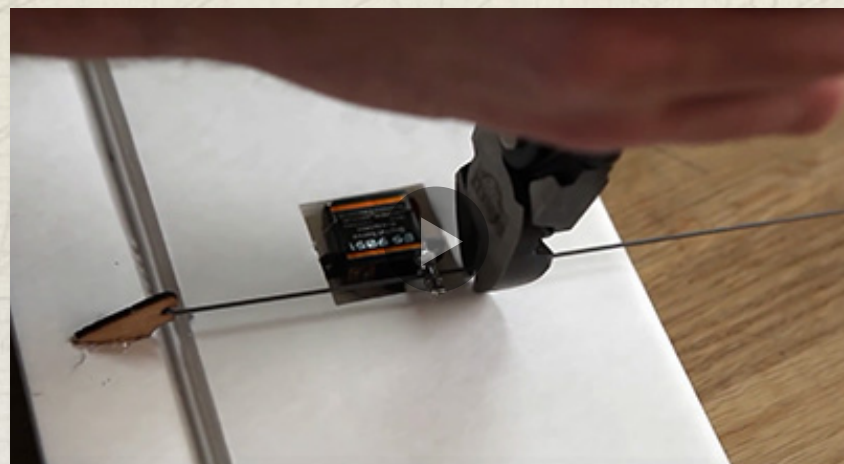
ATTACH YOUR AILERON SERVOS TO YOUR WING

1. Bend a hook in one end of your Push Rod, using it to guide the Servo extensions through the cavity and out the wire hole ([Illustration 30](#)).
2. Remove the stickers from the Servos and scratch them up using Sandpaper or your Knife.
3. Glue the Servo into the square hole ([Illustration 31](#)).



READY YOUR AILERONS FOR FLIGHT

1. Use your Knife to cut the ailerons free ([Illustration 32](#)).
2. If it doesn't break free right away, do a score cut along the seam ([Illustration 33](#)).
3. Fold the aileron over, and make a Bevel with Sandpaper or your Knife ([Illustration 34](#)).
4. Drag a Push Rod or Skewer through the cavities to help the ailerons move better and not bind up ([Illustration 35](#)).



ATTACH CONTROL HORNS TO YOUR ADVANCED WING

1. Pop out two more Control Horns.
2. Press one Control Horn into the slot on the one of the ailerons ([Illustration 36](#)). Ensure it has a free range of motion.
3. Remove the Control Horn, and slide the Z-bend of your Push Rod into the hole, keeping the Z-bend on the inside of the Control Horn.
4. Insert the Push Rod into the Linkage Stopper on your Servo ([Illustration 37](#)).
5. Glue the Control Horn into place.
6. Let thoroughly dry.
7. Use Wire Cutters to remove the excess wire.
8. Center your Servo, and then tighten the Linkage Stopper.
9. Repeat the process on the other aileron.



REINFORCE YOUR ADVANCED WING

1. Cut another piece of your Skewer so that it's slightly smaller than the space between the two ailerons. Always remove the pointy end of Skewer.
2. Cut the portion of tape on the foam along the trailing edge ([Illustration 38](#)).
3. Bend a small crack in the middle of the Skewer so that it matches the shape of the wing, and then glue the Skewer to the foam ([Illustration 39](#)).
4. Use a scrap piece of foam to remove excess glue, then cover it with a piece of tape.
5. Take your Y Lead, and attach to the Servo extensions ([Illustration 40](#)).

THE BUILD

POWER POD & ELECTRONICS



PREPARE THE FOAM PIECES OF YOUR POWER POD

1. Pop out the foam piece for your Power Pod and your Firewall.
2. Remove the foam from the cavities along the sides ([Illustration 1](#)).
3. Use an A Fold to move the side cheek above the bottom plate.
4. If the fit is not to your liking, remove more foam.
5. Glue the foam on the side of the plate ([Illustration 2](#)), and fold over with the side cheek down on the table ([Illustration 3](#)).
6. Let dry, and then repeat the process on the other side.



ATTACH YOUR FIREWALL

1. Place glue on the top edge of the Pod (the side of the angled front portion) as in [\(Illustration 4\)](#).
2. Place the Firewall with the wire slot up and to the right [\(Illustration 5\)](#).
3. Let dry for a second, and then wipe off the excess.
4. Use Packaging Tape to reinforce the Pod, going over the Firewall [\(Illustration 6\)](#).
5. Fold in the edges (you may have to cut a notch in the tape), starting with the longer sides and folding over the front portion last.
6. Reinforce the base with another piece of tape [\(Illustration 7\)](#).



ATTACH YOUR MOTOR

1. Use your Small Knife to open up the holes in the Firewall covered with tape ([Illustration 8](#)).
2. Screw a small length screw (provided with Motor) into the hole on the right ([Illustration 9](#)).
3. Line up the screw with the Motor, and screw it in halfway.
4. Screw in another screw on the other side.
5. This should screw in easily, but if you encounter resistance, don't screw tighter because that could create cross threading and ruin the Motor.
6. After you tighten the screws, the inside should look like [Illustration 10](#).



BIND YOUR RECEIVER TO YOUR TRANSMITTER

1. Set your completed Power Pod aside, and grab your Receiver and Transmitter ([Illustration 11](#)).
2. Insert your bind plug into the Battery Bind channel on your Receiver.
3. Insert your ESC signal wire into the throttle channel.
4. Hook up your Battery to the other end of your ESC signal wire.
5. A light on the Receiver should now be flashing ([Illustration 12](#)).
6. Hold down the trainer switch on your Transmitter. Keeping your throttle closed (with the stick all the way back), turn on your Transmitter while holding onto the trainer switch.
7. When the Transmitter stops flashing, and the Receiver has a solid light ([Illustration 13](#)), they are bound.
8. Remove the bind plug from the Receiver, unplug the Battery and turn off your Transmitter.



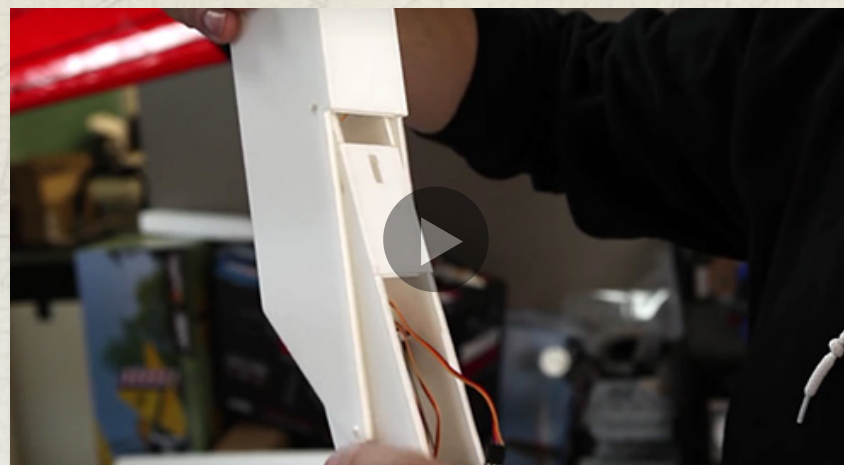
CALIBRATE YOUR ESC

1. Remove the prop from your Power Pod. Connect your ESC to the Motor ([Illustration 14](#)).
2. Place a piece of tape around the Motor ([Illustration 15](#)). This will help you tell if it's running clockwise or counterclockwise (it should run counterclockwise).
3. Turn on the Transmitter, and move the throttle stick all the way up ([Illustration 16](#)).
4. Connect your Battery to the ESC, wait for two beeps and move the throttle stick all the way closed. When your Transmitter beeps again, your ESC will be calibrated.
5. Push up on the throttle a little to see which way the Motor is running. If it's running clockwise, swap two Leads from your ESC wire ([Illustration 17](#)). You can swap any two you want.
6. Test the throttle again to make sure it's running counterclockwise. Pull the throttle all the way down, and remove the tape from the Motor. Unplug the Battery.



ATTACH YOUR POWER POD TO YOUR POWER NOSE

1. Put Velcro on the bottom plate of your Power Pod ([Illustration 18](#)).
2. Lace the wires down through the Power Nose with the Velcro facing down towards the bottom ([Illustration 19](#)).
3. After the Power Pod is seated against the top plate, use your Skewer to puncture the holes on both sides ([Illustration 20](#)).
4. Pass the Skewer through the holes.
5. Cut two Skewers the same length, smaller than the ones used to attach your nose.
6. Pass the Skewers through the holes to attach the Power Pod ([Illustration 21](#)).



ATTACH YOUR POWER NOSE TO YOUR FUSELAGE

1. Take your Battery lead, and snake it forward, allowing the ESC to dangle ([Illustration 22](#) and [22a](#)).
2. Slide the Power Nose onto the Fuselage until it stops.
3. Replace the Skewers to secure the nose to the Fuselage.




SETUP YOUR CONTROL SURFACES ON YOUR RECEIVER

1. Hook up the ESC, Rudder, Elevator and ailerons (if wanted) to the Receiver.
2. See below for common channel setups. It's always a good idea to read your manual, and double check that you have everything plugged in to the right channel.
3. Fold the wires forward into the nose so that they don't get tangled with the Push Rods, and let the antenna go out the bottom ([Illustration 23](#)).




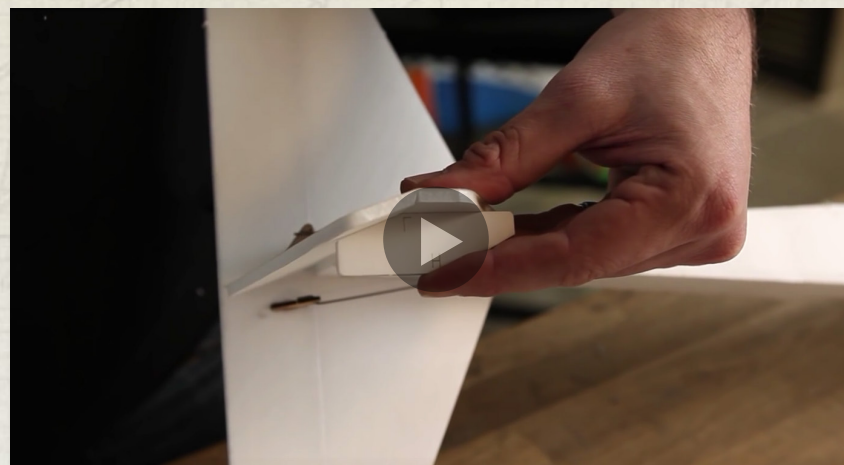
INSERT YOUR BATTERY

1. Place Velcro on your Battery ([Illustration 24](#)).
2. Connect the Battery to the ESC. You should hear a series of beeps from your Transmitter, indicating that it's calibrated.
3. Velcro the Battery on top of the Power Pod ([Illustration 25](#)).
4. Grab your Transmitter to test if all the controls are going the right way. Make sure you keep the left throttle all the way down, and remove your prop. 
5. When you push to the right, the Rudder should go to the right. If it's backwards, reprogram the controller.
6. Go to your Servo settings, and click the Elevator, Rudder or aileron. Then hit enter, and switch the controls. This should program it so that everything operates correctly.




SET YOUR THROWS

1. Use the throw gauge to set it up for either low or high throw. Low throw will give you much more control.
2. Place the throw gauge on the Elevator ([Illustration 26](#)), and make sure it only goes up to that point.
3. This can be done by adjusting your dual rates or popping off your Control Horn and moving the linkage in farther. 



ADJUST DUAL RATES AND EXPO


1. On your Transmitter, go to dual rates and expo. Select which switch you want to give the ailerons. 
2. Move the Rudder so that it comes up directly to the low throw when you put the throw gauge against it.
3. Use your controller to lower the throw until it matches the throw gauge.
4. Repeat the process with the Elevator.
5. Replace your prop with the numbers facing outward ([Illustration 27](#)).

THE BUILD

ATTACH WINGS & CHECK CG (CHUCK GLIDER)



COMPLETE YOUR CHUCK GLIDER


1. Take the Trainer/Free Flight Wing, and place it on top of the body, lining it up against the hatch.
2. Use Rubber Bands to wrap around the Skewers and over the wing until it is secured ([Illustration 1](#)).
3. Put your fingers on the marks, balancing the plane. Let the plane move naturally.
4. You want it to be a touch nose heavy, so add craft clay into the nose until the plane balances ([Illustration 2](#)). 

THE BUILD

ATTACH WINGS & CHECK CG (RC/MOTORIZED)



COMPLETE YOUR RC/MOTORIZED TINY TRAINER

1. Take either the Trainer/Free Flight Wing or the Advanced Wing, and place it on top of body, lining it up against the hatch.
2. Use Rubber Bands to wrap around the Skewers and over the wing until it is secured ([Illustration 1](#)).
3. Put your fingers right on the marks, balancing it. Let the plane move naturally.
4. You want it to be a touch nose heavy when you hold it from the marks. Move the Battery to adjust until the plane balances ([Illustration 2](#)). 



FIRST FLIGHT QUICK TIPS



- CHECK YOUR CONTROL SURFACES
- THE HIGH FIVE METHOD
- CENTER OF GRAVITY
- CHECK YOUR BATTERY
- CHECK YOUR RANGE
- ALWAYS TAKE OFF AND LAND INTO THE WIND



CONNECT WITH THE COMMUNITY

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EXPAND THE FLEET

Now that you've conquered the Tiny Trainer, you're ready to tackle almost any airship in the Flite Test fleet. You can find all of our planes at www.flitetest.com/store.





SHARE THE EXPERIENCE

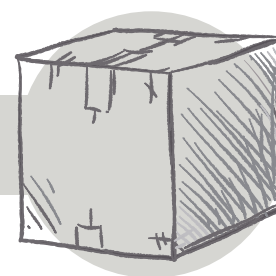
Like many things, the world of RC flight is more fun with friends. Whether it's RC flight or another hobby, share your interests and passions with others.

At Flite Test, we are passionate about entertaining, educating and empowering people to explore the amazing world of flight. We sincerely hope that the Tiny Trainer experience has inspired you to take another flight. Thanks again for being a part of our team.

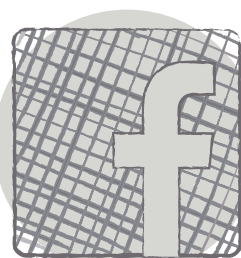
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